Wiring Guide

EP.HIO

Version 1.03

Last Updated: 14-10-2014

ENTRYPASS

Note:

See http://www.entrypass.net/ for updates, revisions, and download the latest installation manual

Platform1 version 3 support 6 and 10 digits format
For existing site, P1 will detect its card database to determine 6 or 10 digits; For new site, user can change the digits as long as the card database is empty

Please refer to separate EntryPass Platform1 User Manual for detail operation help. The Official EntryPass Platform1 User Manual can be downloaded from our website under “Download” section

Before you begin

Technical Support

If you cannot find the answer to your question in this manual or in the Help files, we recommend you contact your system installer. Your installer is familiar with your system configuration and should be able to answer any of your questions.

Should you need additional information, please call our Technical Support Help desk, Monday to Friday 9:00 AM to 6:00 PM (GMT +8:00)

Method Details
Phone + 60 (3) - 8068 1929
Fax + 60 (3) - 8068 1922
Internet www.entrypass.net
Email support@entrypass.net

Considerations Prior to Installation

Preparing Your EntryPass Controllers

EntryPass controller contains numerous delicate electronic circuits and components which can become damaged as a result of electrostatic discharge (ESD). Thus, prior to installation, please follow the instruction below:

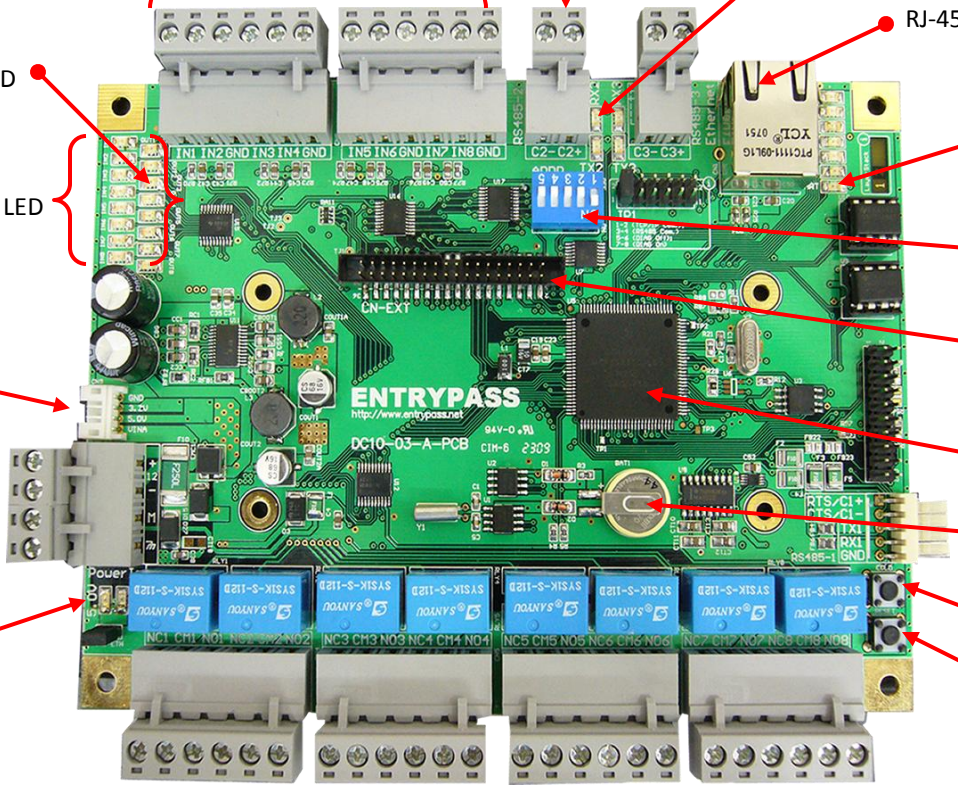
- Observe precautions while handling the circuit board assembly by using proper grounding straps and handling precautions at all
- Visually ensure no onboard parts is broken, damage or contains burn mark
- Do not turn on the power supply until you completed all wiring and external add on devices installations

CAUTION
Battery may explode if mistreated. Do not recharge, disassemble or dispose of in fire. To prevent a risk of explosion do not pry the battery out with a metal or conductive tool.

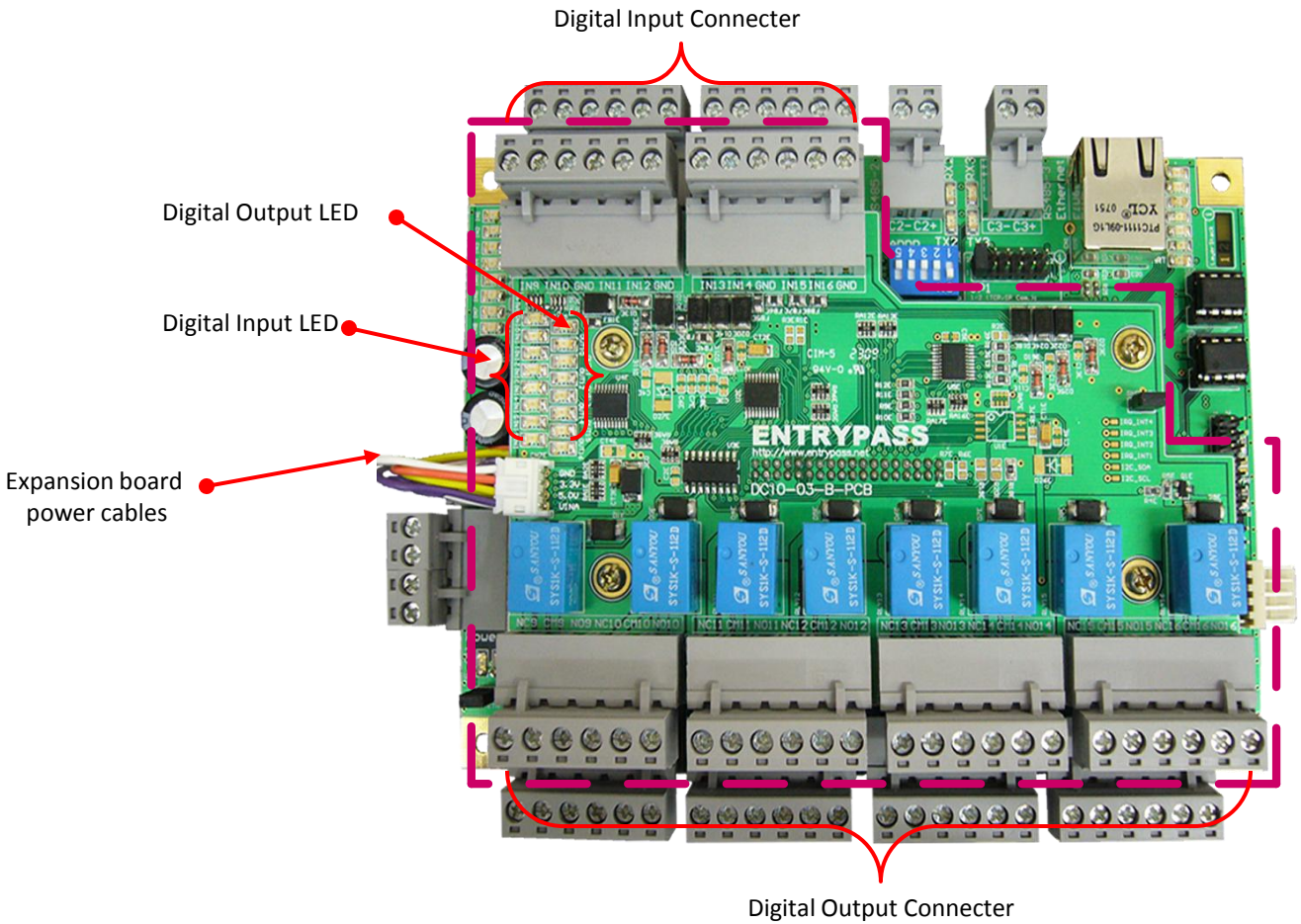
Instances of Non-Warranty

- Damage due to natural disaster, accident or human cause.
- Damage as a result of violating the conditions recommended in the user manual
- Damage due to improper installation
- Damage due to use of uncertified components
- Damage due to use exceeding the permitted parameters

Component Description

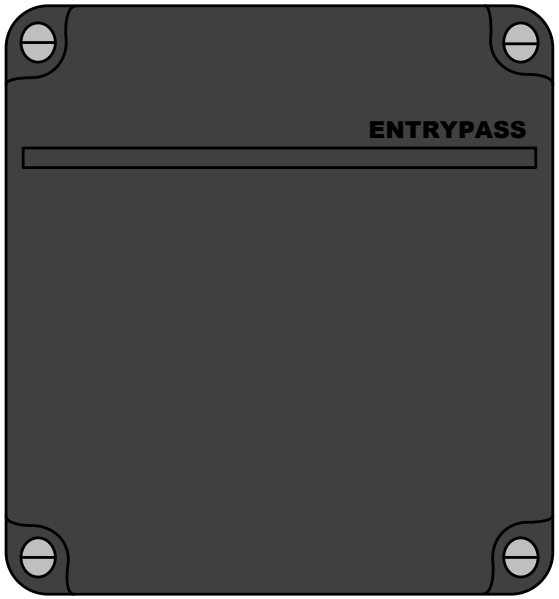


Component Description (With expansion board)



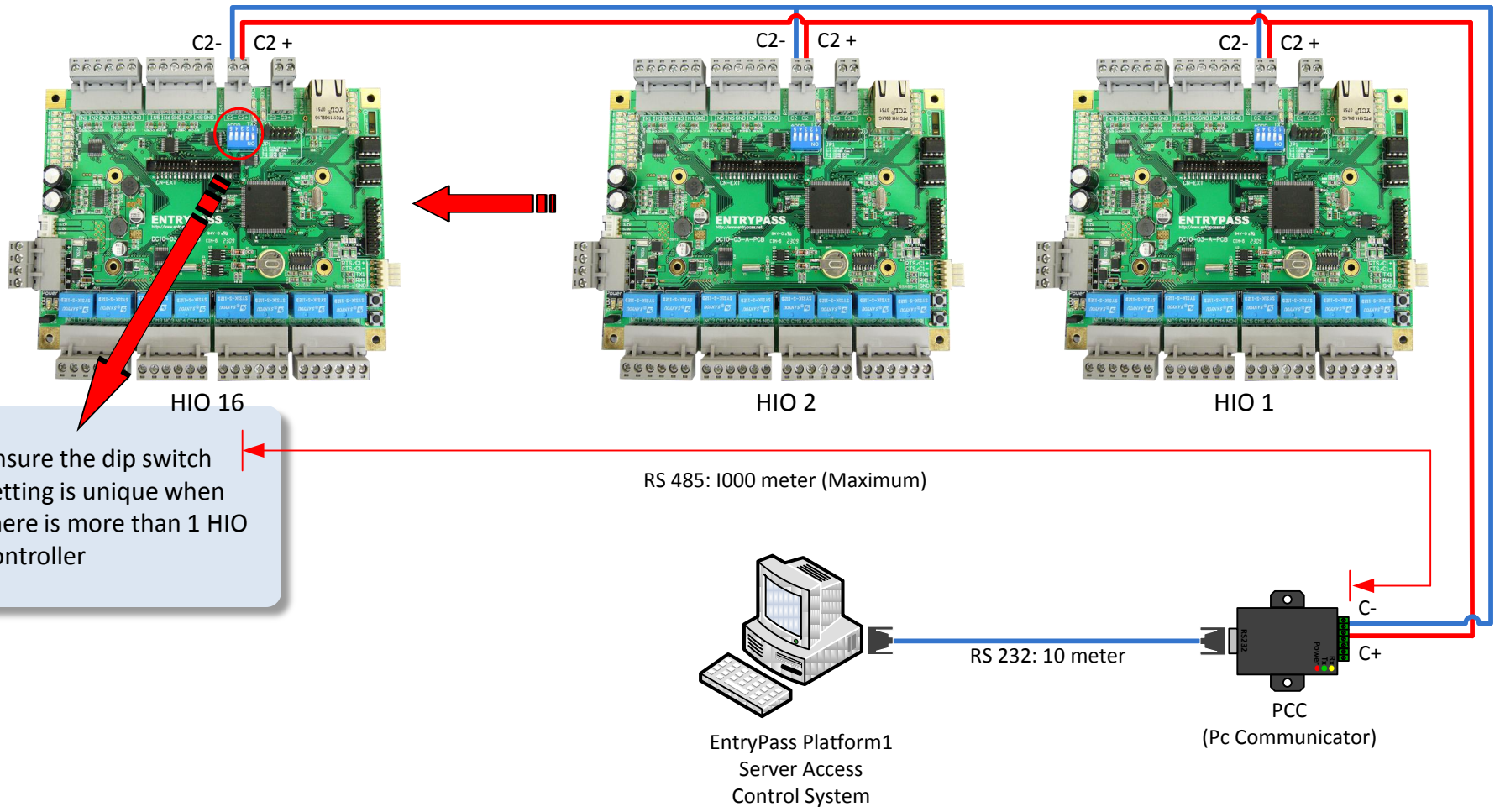
With the expansion board attached to the HIO controller, the HIO now support 16 Digital Inputs and 16 Digital Outputs

Power Supply Unit Specification



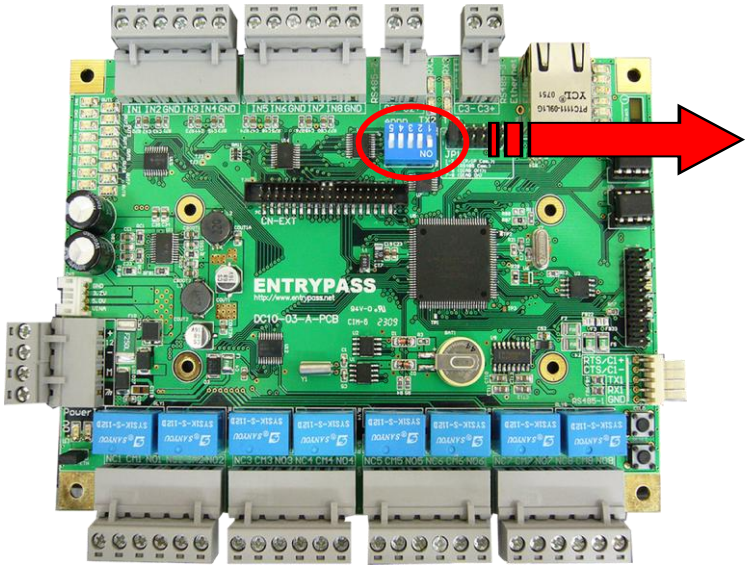
Power Supply Unit Specification:
- Switching Power Supply
- 12V DC
- 3 Amp (Minimum)

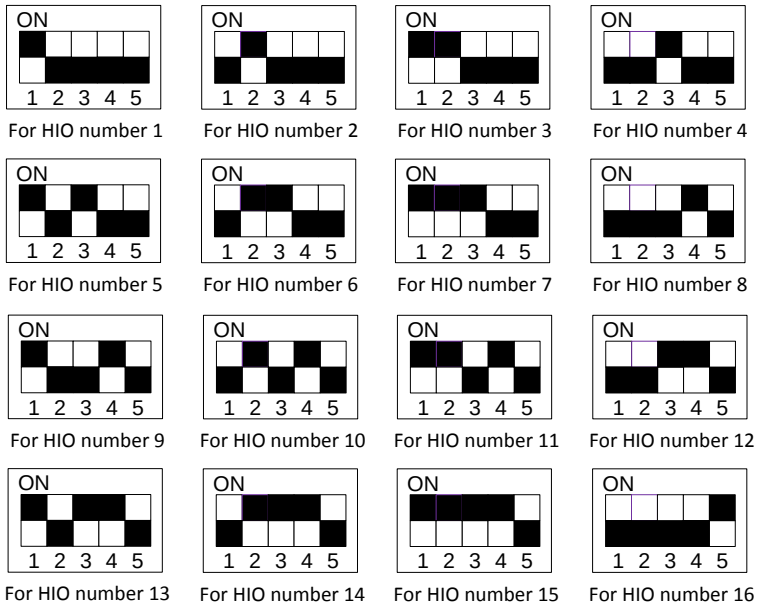
Connecting to the PC using RS 485 mode (Alarm Monitoring Application)



When in RS485 mode, a total of 16 sets HIO controllers can be connected to each bus/comport.

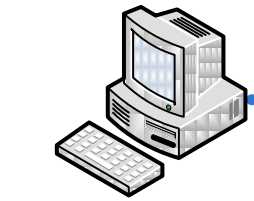
HIO Dip Switch Setting (Alarm Monitoring Application)





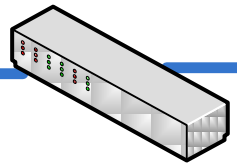
If more than 1 HIO controller is connected to the PCC, the dip switch must be configure according to the pattern shown above. The default dip switch configuration of the HIO controller is 1 (ON)

Connecting to the PC using TCP/IP mode (Alarm Monitoring Application)



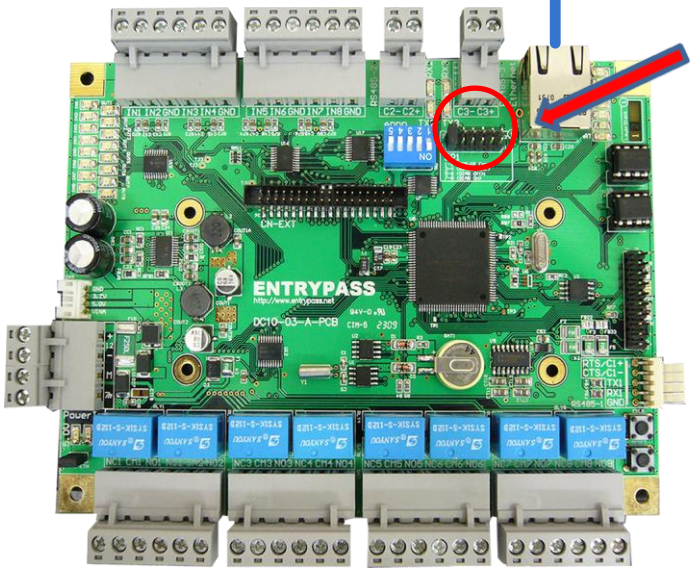
EntryPass Platform1 Access Control System

Cat-5



Network Switch

Cat-5



JP1

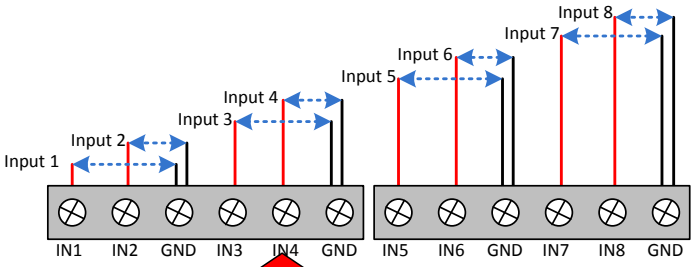
Default HIO controller network setting:

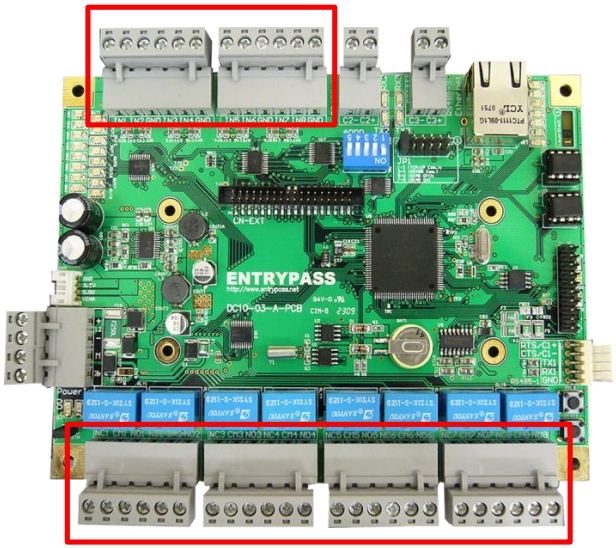
1) IP address: 192.168.1.100
2) Subnet Mask: 255.255.255.0
3) Gateway: 0.0.0.0
4) Server IP address: 192.168.1.254

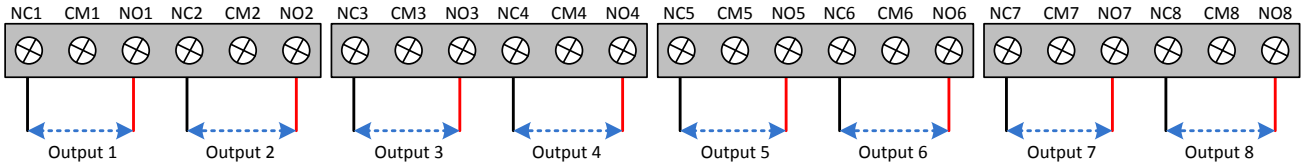
To change the network setting, simply logon to the web server.

The distance from HIO controller to network switch should not more than 100 meter .
Please ensure the jumper is inserted on JP1 3-4 for TCP/IP mode.

HIO digital input and digital output connector (Alarm Monitoring Application)



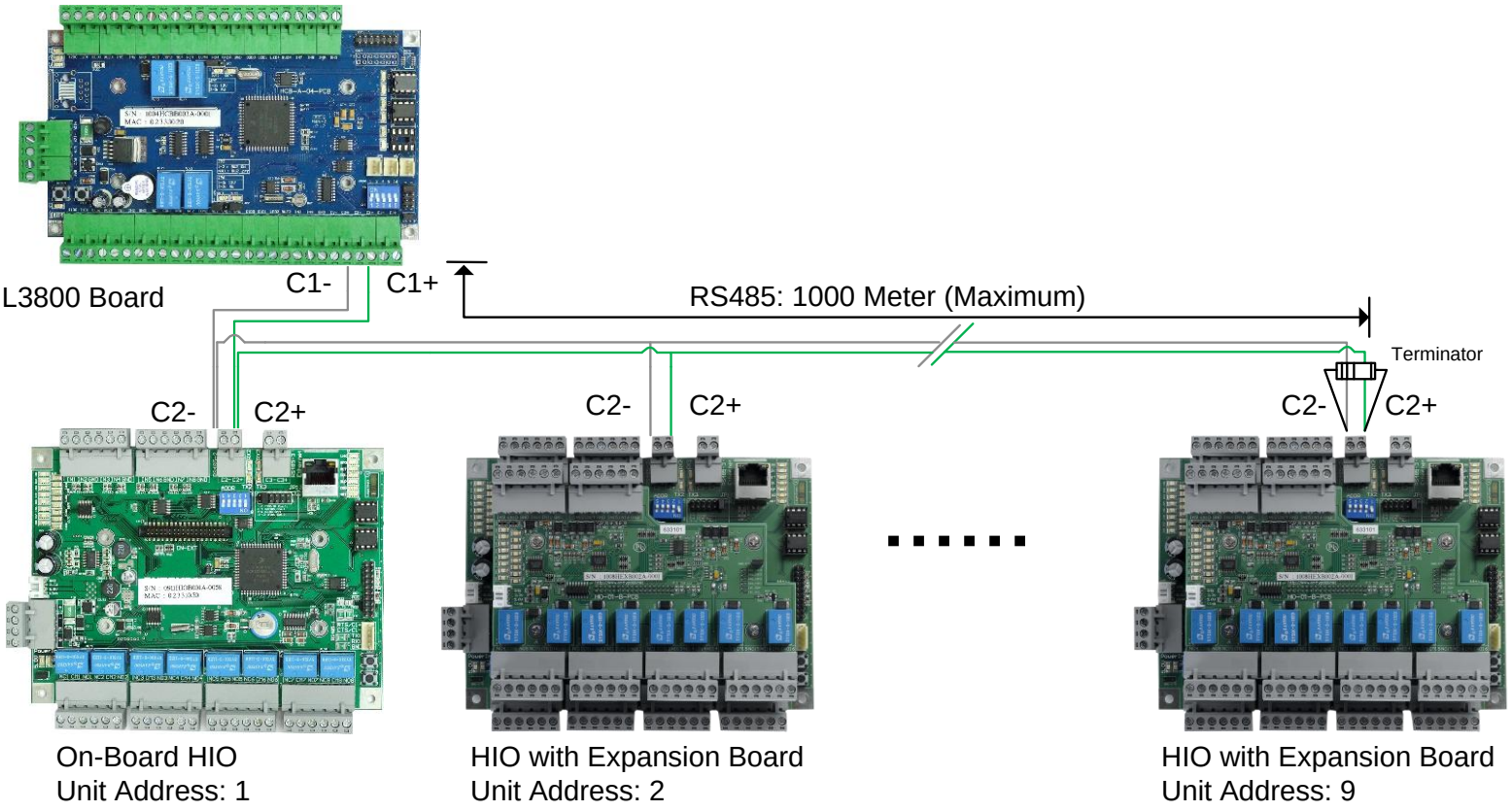



NC1 CM1 NO1 NC2 CM2 NO2 NC3 CM3 NO3 NC4 CM4 NO4 NC5 CM5 NO5 NC6 CM6 NO6 NC7 CM7 NO7 NC8 CM8 NO8
Output 1 Output 2 Output 3 Output 4 Output 5 Output 6 Output 7 Output 8

Digital Input:
Is a dry contact point and the input can be configurable either close trigger or open trigger to suits different contact devices such as PIR, magnetic sensor, vibration sensor, smoke sensor and etc

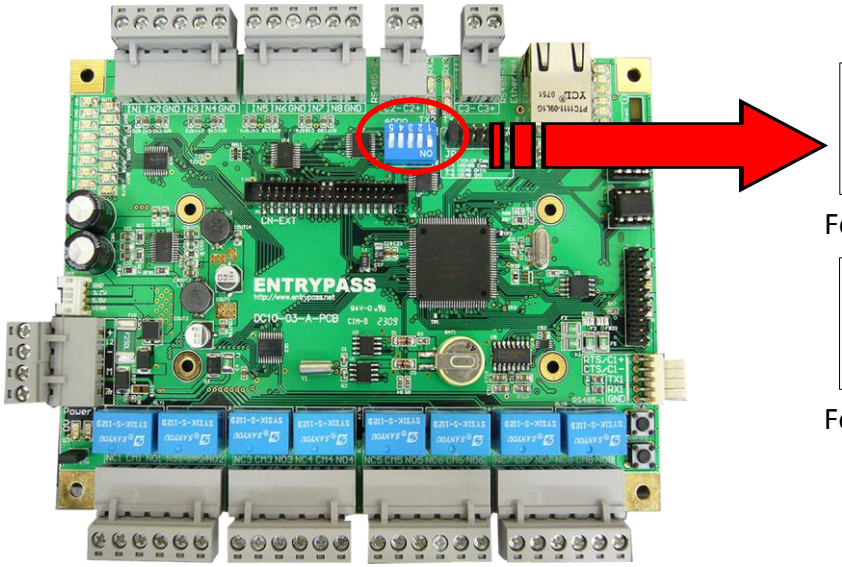
Digital Output:
Selectable output either in normally close or normally open connection.

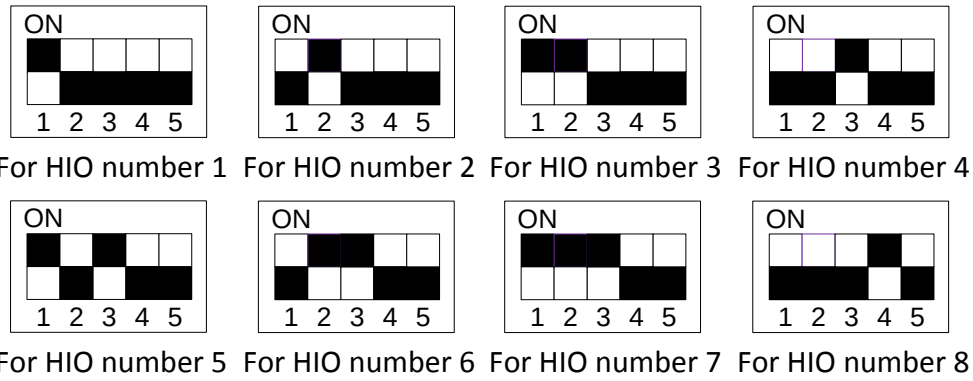
Connecting HIO to the L3800 controller (Lift Application)



The On-Board HIO is shipped in package with L3800
Is advisable to connect a resistor (100 Ohm) as terminator on last HIO
Other HIO boards must loop from ON-board HIO C2+/C2-

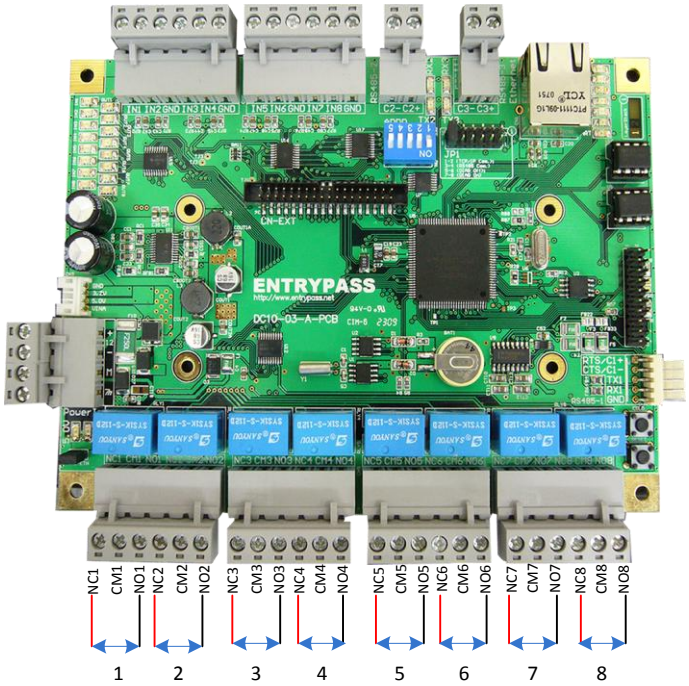
HIO Dip Switch Setting (Lift Application)





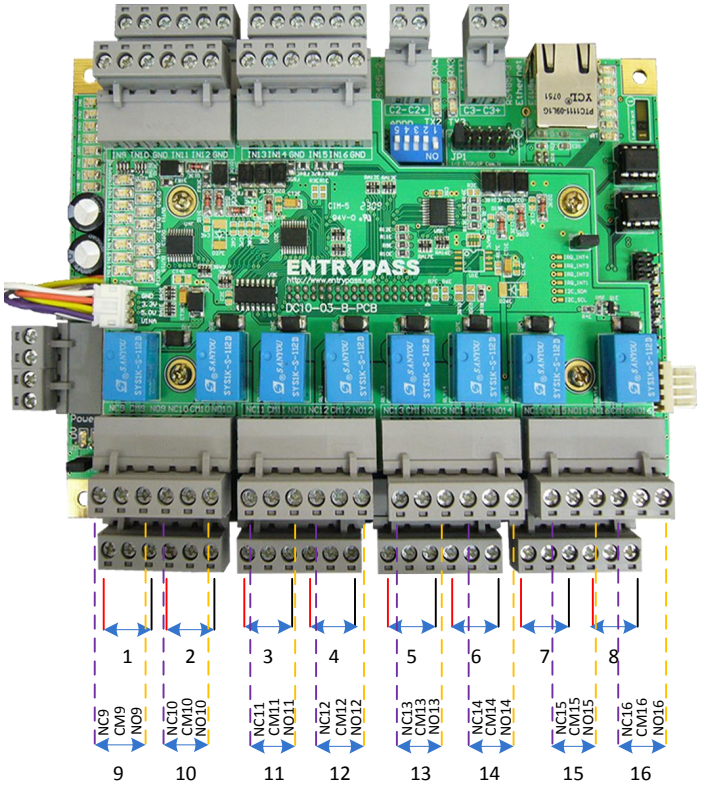
If more than 1 HIO controller is connected to the L1000 controller, the dip switch must be configure according to the pattern shown above. The default dip switch configuration of the HIO controller is 1 (ON)

HIO Output Connector (Lift Application)



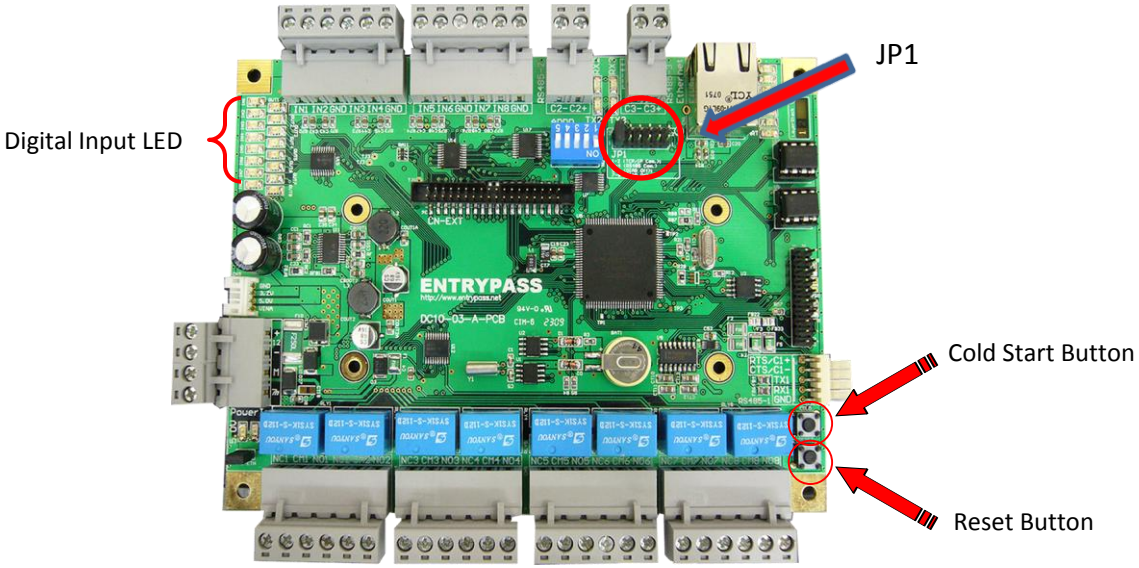
You can select the HIO output either in normally open state (NO) or normally close state (NC) and this HIO output connection is connected to the Lift Controller (floor button location). Thus, 1 HIO (without expansion board) can control up to 8 floors (Due to the 8 outputs available)

HIO Output Connector - With expansion board (Lift Application)



You can select the HIO output either in normally open state (NO) or normally close state (NC) and this HIO output connection is connected to the Lift Controller (floor button location). Thus, 1 HIO (with expansion board) can control up to 16 floors (Due to the 16 outputs available)

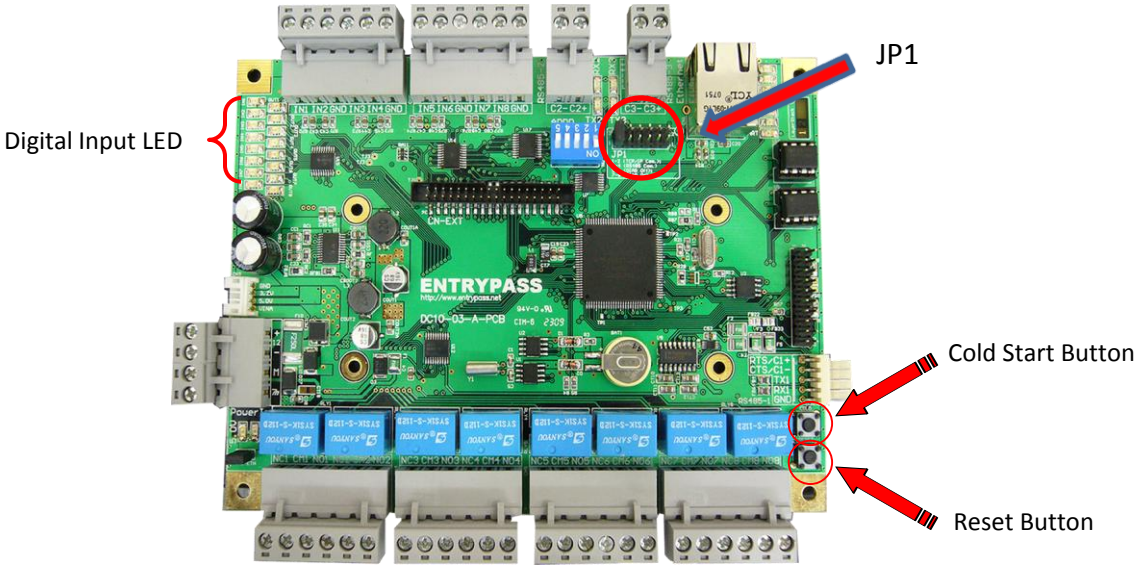
Performing Cold Start



Steps of performing cold start:

1. Please ensure that the jumper is inserted on JP1 1-2
2. Press Cold Start Button
3. Hold the Cold Start Button and press Reset Button
4. Release Reset Button and hold the Cold Start Button
5. Hold the Cold Start Button for about 2 sec
6. Release the Cold Start Button
7. All the 8 Digital Inputs LED will turn ON
8. When the process is complete, all the inputs LED will turn OFF

Performing Factory Default

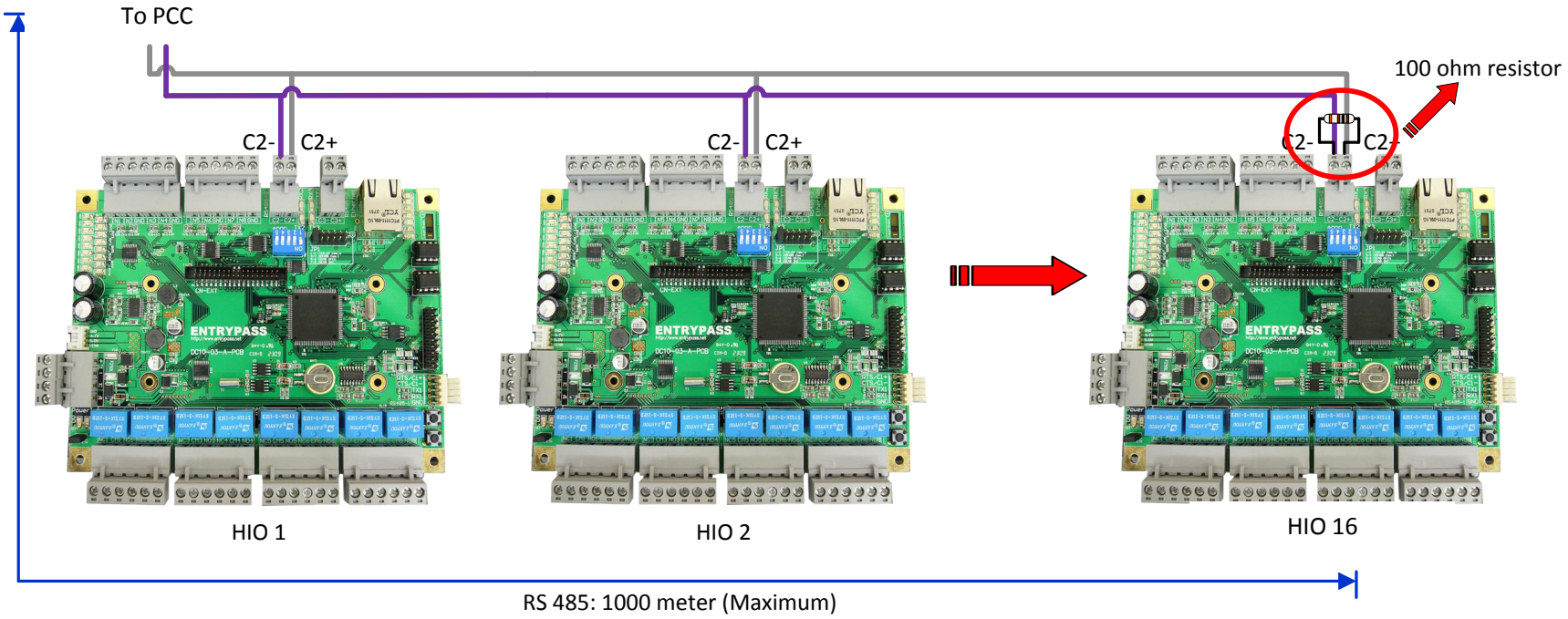


Steps of performing factory default:

1. Please ensure that the jumper is inserted on JP1 11-12
2. Press Cold Start Button
3. Hold the Cold Start Button and press Reset Button
4. Release Reset Button and hold the Cold Start Button
5. Hold the Cold Start Button for about 2 sec
6. Release the Cold Start Button
7. All the 8 Digital Inputs LED will turn ON
8. When the process is complete, all the inputs LED will turn OFF

Factory Default will change the IP Address back to 192.168.1.100, Server IP to 192.168.1.254 and Port to 2020

Termination Setting



It is advisable to insert a resistor value of 100 ohm on the last HIO controller for termination purpose if installation involve long communication distance or multiple units of HIO

Cabling Information

Communication	Data Signal	Max Distance	Description
Computer to PC Communicator	RS 232	10m (30 ft)	22 AWG, 2 Pairs, Shielded
PC Communicator to HIO	RS 485	1000m (3000 ft)	22 AWG, 2 Pairs, Shielded
Network Switch to HIO	Network	100m (300 ft)	24AWG, 4 Pairs
HIO digital input contact	Contact	1000m (3000 ft)	24 AWG, 1 Pairs